

INCIDENT MANAGEMENT FLUSH PLANS

The PASS project also developed signal coordination flush plans along North Canyon Pkwy, Portola Ave, and Livermore Ave to help manage the traffic when an incident occurs on the adjacent I-580. These signal timing plans called the Incident Management flush plans aim to effectively take the diverted traffic from the city streets back onto the freeways. The city staff are now able to remotely select and activate these flush plans based on the location and time of the incident on the freeway.

BENEFITS TO VARIOUS MODES



BENEFITS TO BICYCLISTS: For improved safety, the minimum green intervals were reviewed for bicyclists on the corridors.

Changes to minimum green intervals were made at 21 project intersections.



BENEFITS TO PEDESTRIANS: For improved safety, the pedestrian intervals were reviewed and increased at most intersections based on current 2012 California MUTCD standards.

Changes to pedestrian timing were made at all 33 project intersections.



BENEFITS TO TRAFFIC SAFETY: To enhance traffic safety, the yellow clearance timing parameters were updated based on current standards.

Changes to clearance intervals were made at 13 project intersections.

Project Costs

Consultant Costs (Basic Services/Plans, Incident Management Flush Plans)	\$97,135
Other Project Costs (Reduced Services, GPS Clocks)	\$710
Agency Staff Costs (Estimate)	\$21,338
Total Costs	\$119,183

Project Benefits

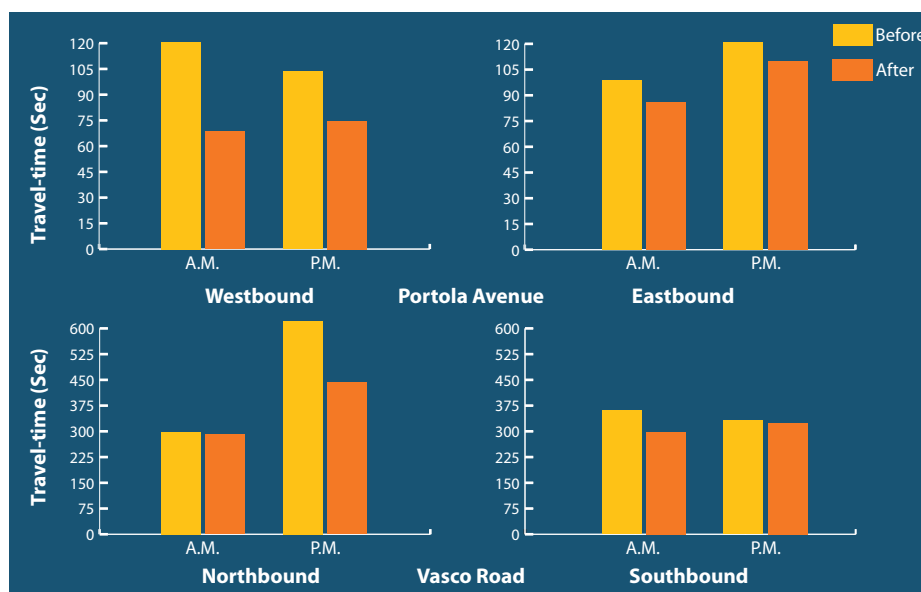
Measures	Annual Average		Lifetime (5 Years)	
	Savings	Monetized Savings	Savings	Monetized Savings
Travel Time Savings	16,599 hrs.	\$316,834	82,994 hrs.	\$1,584,169
Fuel Consumption Savings	46,981 gal.	\$188,806	234,906 gal.	\$944,029
ROG Emissions Reduction	0.28 tons	\$356	1.41 tons	\$1,778
NOx Emissions Reduction	0.33 tons	\$5,906	1.64 tons	\$29,532
PM10 Emissions Reduction	0.06 tons	\$8,298	0.29 tons	\$41,491
CO Emissions Reduction	2.25 tons	\$174	11.24 tons	\$869
Total Lifetime Benefits				\$2,601,868

Overall Project Benefits

	Auto
Average Decrease in Travel Time	11%
Average Speed Increase	15%
Average Fuel Savings	8%
Average Reduction in Signal Delay	36%
Average Reduction in Number of Stops	37%

Overall Benefit-Cost Ratio

24:1



PROJECT BENEFITS SUMMARY



Average Reduction in Auto Signal Delay: 36%

Average Reduction in Number of Stops: 37%

Auto Fuel Consumption Savings: 8% or 234,906 gallons



Total Emissions Reduced (ROG, Nox, PM10, CO): 14.58 tons

Auto Travel Time Savings: 11% or 82,994 hours



Overall Project Benefit-cost Ratio = 24:1

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LIVERMORE
CALIFORNIA

